State of Illinois
ENVIRONMENTAL PROTECTION AGENCY
MEMORANDUM

DATE: November 8, 2010

TO: Division Files - Bureau of Land

FROM: Chris Cahnovsky – Collinsville Region

SUBJECT: 1198010003 – Madison County
Estate of Chemetco
FOS File

On November 3, 2010, Michelle Cozadd and I conducted an inspection at Chemetco, Inc. Present during this inspection were Jorge Garcia, ES&H Manager for the Estate of Chemetco, Duane McVey from the Estate and Mike Murray of AIS.

DOME BUILDING

Stainless steel continues to be brought to the Dome Building. No blasting has taken place yet.

FINES BUILDING

The tarp on the Fines Building was closed. The pile of concrete and debris is still in the Fines Building. AIS has sampled the debris. I was told that David Herrera had the results.

FOUNDRY BUILDING

On March 27, 2008 the Estate of Chemetco submitted a work plan for the removal and sale of pot slag and furnace cleanup solids. This work plan was approved by the Illinois EPA. The Estate revised this work plan on January 21, 2010 with a final revision on February 8, 2010. The Illinois EPA approved the revisions. The work plan was for the sale of about 150 metric tons of pot slag and furnace clean up solids to Kataman. Kataman contracted with Environmental Management Alternative to load the material for overseas shipment to Aurubis AS in Lonen, Germany. The loading started around October 25, 2010 and ended October 29, 2010. Fourteen loads, totaling about 280 tons, were shipped.

Mixed in with the loads of pot slag and furnace clean up solids were about 70 drums of metal bearing material that were in the Foundry Building. These drums consisted on brass skimming, tin mud, copper paste, brass grindings and copper fines. Attached is a list of lots that are in the Foundry. The following lots on that list were mixed with the pot slag and shipped off-site: P7B-G269, P7B/769, P7B-G930, P9/I039, P10-I918 and P10-I919. The drums were emptied onto a pile of pot slag or foundry clean up solids on the foundry floor. The mixture was then loaded into a container. The mixing of the drums with the pot slag and foundry clean up solids was not in any of the submitted work plans. Per Mr. McVey the material in the drums is the same type of material that would make up the foundry clean up solids.

TEMPORARY WASTE DRUM STORAGE BUILDING

Per Mr. Garcia 15 drums that were in this building have been moved to the Tank House. These drums have been lab packed with the material AIS collected from the Tank House demolition. The drums moved contained aerosol cans, paint cans, oil, grease and unknown liquids. Mr. Garcia provided me with an inventory of the waste that was moved (attached).

TANK HOUSE

In the Tank House I observed that the miscellaneous chemical containers collected from the Tank House have been combined into lab packs. I observed about 28 containers of waste. AIS is currently in the process of profiling the waste with Heritage Environmental. Next to the lab packed drums I observed three rows of 55-gallon drums. Each row contained about eleven drums. The first two rows contained grease and the third row contained oils. Per Mr. Garcia, the Estate is looking for a company to recycle or dispose of the oil and grease.

AAF DEMOLITION

AIS has begun the demolition of the AAF area. Demolition of the area at the corner of the Tank House and Foundry Small has been nearly complete. The scrap is being cut into five foot sections to meet the recycler's specification. The stainless steel is being stockpiled prior to being moved to the Dome Building for decon. The other steel is being directly sent to Grossman Metals. To date nine (9) RCRA boxes have been filled with hazardous waste. The oldest box is dated November 23, 2010. These boxes have been profiled to go to Heritage.

CNC
cc: Regional Files
cc: Erin Rednour
cc: Michelle Kerr - USEPA

	Lot #	Supplier	Description	Weight	# of drums	Comments	% Cu	% Pb	% Sn	% Ni	% Fe	% Zn	% Sb	% Al	% Au	% Ag
P3	E564	Alpha Omega	tin mud-sn/cu cake	10,622	20	Inventory assay Spectroscopy gun	2.84 22	1.52	4.81 60	0.14	0.78	2.89	0.01	0.13		
P4	E566	Alpha Omega	low gr. Cu cement	742	2 drums	never assayed	25									
P12	E800	Cme Chicago W/H ***Marsco Manufacturing	tin mud	17,506	64	Inventory assay Spectroscopy gun	0.05	0.1	2.25 98		0.06	0.01		0.2		0.001
P6	F327	Halpern Bros.	high grade cu dust	24,476	32 drums		26.34	0.03	0.04		0.16	0.09	0.01	32.67		
P7B	G269	Cme Newark W/H, ****Acu Powder Intl.	br. Skims	711	1	dunnage 120 lbs	68.24	0.11	0.66		0.08	16.78	0.03	0.06		0.006
P7B	G769	Cme Chicago W/H, ****Marsco Manufacturing	tin mud	17602	6		0.01	0.01	4.14		0.15			0.26		
P7B	G930	Cme LA W/H, ****Valley Brass	br. Grinds	1315	3	dunnage 80 lbs.	43.53									
P1	H152	Reflective Recycling	tin fines	19,072	36		0.06	0.22	10.48	0.02	13.55	0.07		0.02		
P1	H153	Reflective Recycling	Tin dross	15,098	24		0.04	0.07	5.08	0.01	10.74	0.02				0.026
P12	H440	Per Scholas, Inc.	lead glass	1,380	2-55 gal dr.		1	22								
P8	I038	Cme Cleveland W/H, ***Fusion Inc.	solder dross	1,621	3 drums		58.46	1.04	4.52		0.68	2.76	0.02	0.31		0.034
P9	I039	Cme Cleveland W/H, ***Fusion Inc.	copper paste	1962	2	160 lbs. tare	79.58	0.11	0.66		1.12	0.02		0.04		
P2	I283	Cardinal Stabilizers	tin mud, b/l states ditch sludge, tin solids, non-haz,non-reg	21,700	12 totes		0	1.5			0.79		0.01	0.04		
P8	I314	Cme Boston W/H, ****Max Metals	solder dross	856	1 dr.		0.15	32.13	61.34							
P5	I666	Butler MacDonald	irony copper, shred boards????	16605		725 lbs. tare	8.17	0.94	1.16	0.46	25.33	1.36	0.04	0.69	0.003	0.022
P9	I764	????? - Do not have a lot # like that on inventory														
P10	I816	Toronto W/H	heavy connectors	253	1 dr.		14	0.5	2.5	0.25					0.017	0.103
P9	I898	Cme Detroit ***Visteon	brass grinds salt size	4905	16 drums		31.3	0.14	0.19		4.01	0.07	0.01	1.93		
P10	I918	Ford Meter Box	cu fines they call it slag	6,359	6-55 gal. dr.		26.78	2	0.77	0.12	1.41	16.18	0.03	0.19		0.003
P10	I919	Ford Meter Box	cu fines, they called it residues, #2 dust, R Metal and Type B	20309	26-55 gal. dr		24.39	2.77	1.07	0.06	9.41	3.81	0.02	0.2		
P8	I980	Southwestern Fdy	cu fines they called it fdy sand	18033	19 bbls/2bx	Never assayed Spectroscopy gun	1 38	16	10		0.7	17				
P9	J005/ 006	Cme Charlotte W/H ****Federal Mogul	tin fines 2 lots of tin oxides	7,190		Never assayed	1	0	50							
			J005 and J006 showed	21 drums for the 2 lots		Spectroscopy gun	10	27	35	0.05	11.4					

*****4 unknown lots

contents of highlighted cells were added to sold pot slag/furnace dust material.

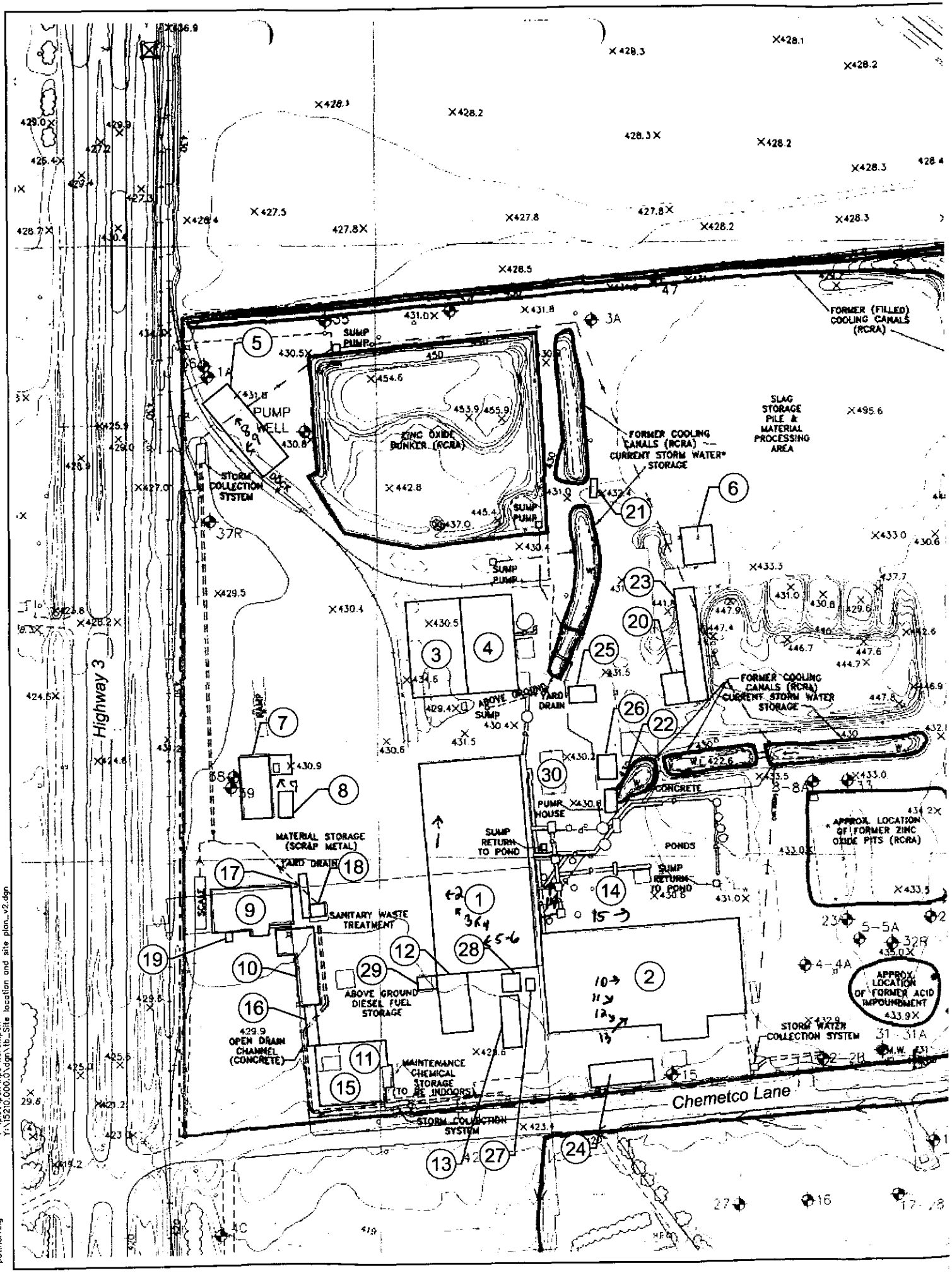
[redacted] highlighted drums were taken to the Tank House, properly cataloged, and packaged. Waiting for disposal.

Temp Drum Storage Area					
Number of Drums	Drum Type/Size	Lot #	Contents	Media	Comments
16	steel/55 gal	H152	Tin Dross	solids	low level Tin originally purchased by ECS, material to be used as process material
2	steel/55 gal	NA	Misc. aerosol cans	solids	labeled "Aerosol Cans"
2	steel/55 gal	NA	clear oily liquid	liquid	partial "Corrosive" label Caustic Soda, unable to open top
					slightly rusted, oily top, one drum ~ 60% full, and other ~ 5% full (nearly empty).
1	steel/55 gal	NA	Misc. aerosol cans	liquid	slightly rusted top, organic odor
2	plastic/55 gal	NA	unknown white liquid	liquid	One drum contains "corrosive label" pH of 1
3	steel/55 gal	NA	unknown	liquid	slightly rusted, one drum labeled "used oil", other 2 drums have rusted top, unable to open.
1	plastic/55 gal	NA	empty		Marked "Frames/ Cu only"
2	plastic/55 gal	NA	unknown, yellowish liquid	liquid	Blue plastic drums, one full, other partially full, one drum under pressure and the other contained some vapors. pH of 1
2	steel/30 gal	NA	Grease	solids	Red Gear Grease
1	steel/30 gal	NA	lead Batteries	solids	Drum contains 4 batteries, additional battery located on pallet
1	steel/55 gal	NA	Binder (Magneco-Matrel)	solids	material used for binding refractory material (drum/label dated 10-05-01). Drums brought from Tank house Area.
2	steel/55 gal	NA	Binder (Magneco-Matrel)	solids	material used for binding refractory material (drum/label dated 04-27-01). Drums brought from Tank house Area.
1	steel/55 gal	NA	Nalco 1142- Colloidal Silica	solids	Material used for binding refractory material. Drums brought from Tank house Area.
1	steel/55 gal	NA	Copper coated plastic strips	solids	Open top drum contain copper coated plastic strips (circuitry board remnants material)
1	pallet		Very Rusty Paint cans, aerosol cans, pressure cans		Materials to be placed in over pack 55 gal drums for disposal. Will included with other like material from Tank House for proper disposal.
2	pallets		Super Sacks		2 pallets of Super-Sacks, Super sacks to be moved to receiving building
1			Super Sacks		1 metal container full of Super Sacks. Super sacks to be moved to receiving building
2			scales		2 metal weight scales

Temp Drum Storage Area					
Number of Drums	Drum Type/Size	Lot #	Contents	Media	Comments
16	steel/55 gal	H152	Tin Dross	solids	low level Tin originally purchased by ECS, material to be used as process material
2	steel/55 gal	NA	Misc. aerosol cans	solids	labeled "Aerosol Cans"
2	steel/55 gal	NA	unknown	liquid	partial "Corrosive" label Caustic Soda, unable to open top
2	steel/55 gal	NA	clear oily liquid	liquid	slightly rusted, oily top, one drum ~ 60% full, and other ~ 5% full (nearly empty).
1	steel/55 gal	NA	Misc. aerosol cans	liquid	slightly rusted top, organic odor
2	plastic/55 gal	NA	unknown white liquid	liquid	One drum contains "corrosive label"
3	steel/55 gal	NA	unknown	liquid	slightly rusted, one drum labeled "used oil", other 2 drums have rusted top, unable to open.
1	plastic/55 gal	NA	empty		Marked "Frames/ Cu only"
2	plastic/55 gal	NA	unknown, yellowish liquid	liquid	Blue plastic drums, one full, other partially full, one drum under pressure and the other contained some vapors
2	steel/30 gal	NA	Grease	solids	Red Gear Grease
1	steel/30 gal	NA	lead Batteries	solids	Drum contains 4 batteries, additional battery located on pallet
1	steel/55 gal	NA	Binder (Magneco-Matrel)	solids	material used for binding refractory material (drum/label dated 10-05-01). Drums brought from Tank house Area.
2	steel/55 gal	NA	Binder (Magneco-Matrel)	solids	material used for binding refractory material (drum/label dated 04-27-01). Drums brought from Tank house Area.
1	steel/55 gal	NA	Nalco 1142- Colloidal Silica	solids	Material used for binding refractory material. Drums brought from Tank house Area.
1	steel/55 gal	NA	Copper coated plastic strips	solids	Open top drum contain copper coated plastic strips (circuitry board remnants material)
1	pallet		Very Rusty Paint cans, aerosol cans, pressure cans		Materials to be placed in over pack 55 gal drums for disposal. Will included with other like material from Tank House for proper disposal.
2	pallets		Super Sacks		2 pallets of Super-Sacks, Super sacks to be moved to receiving building
1			Super Sacks		1 metal container full of Super Sacks. Super sacks to be moved to receiving building
2			scales		2 metal weight scales

	Lot #	Supplier	Description	Weight	# of drums	Comments	% Cu	% Pb	% Sn	% Ni	% Fe	% Zn	% Sb	% Al	% Au	% Ag
P3	E564	Alpha Omega	tin mud-sn/cu cake	10,622	20	**Inventory assay** **Spectroscopy gun**	**2.84** **22**	**1.52**	**4.81** **60**	**0.14**	**0.78**	**2.89**	**0.01**	**0.13**		
P4	E566	Alpha Omega	low gr. Cu cement	742	2 drums	never assayed	**25**									
P12	E800	Cme Chicago W/H ***Marsco Manufacturing	tin mud	17,506	64	**Inventory assay** **Spectroscopy gun**	**0.05**	**0.1**	**2.25** **98**		**0.06**	**0.01**		**0.2**		**0.001**
P6	F327	Halpern Bros.	high grade cu dust	24,476	32 drums		**26.34**	**0.03**	**0.04**		**0.16**	**0.09**	**0.01**	**32.67**		
P7B	G289	Cme Newark W/H, ****Acu Powder Intl.	br. Skims	711	?	dunnage 120 lbs.	**69.24**	**0.11**	**0.65**		**0.08**	**16.79**	**0.03**	**0.05**		**0.005**
P7B	G769	Cme Chicago W/H, ****Marsco Manufacturing	tin mud	17602	68		**0.01**	**0.01**	**4.14**		**0.15**			**0.26**		
P7B	G930	Cme LA W/H, ****Valley Brass	br. Grinds	1315	?	dunnage 80 lbs.	**43.53**									
P1	H152	Reflective Recycling	tin fines	19,072	36		**0.06**	**0.22**	**10.48**	**0.02**	**13.55**	**0.07**		**0.02**		
P1	H153	Reflective Recycling	Tin dross	15,098	24		**0.04**	**0.07**	**5.08**	**0.01**	**10.74**	**0.02**				**0.026**
P12	H440	Per Scholas, Inc.	lead glass	1,380	2-55 gal dr.		**1**	**22**								
P8	I038	Cme Cleveland W/H, ***Fusion Inc.	solder dross	1,621	3 drums		**58.45**	**1.04**	**4.52**		**0.68**	**2.75**	**0.02**	**0.31**		**0.034**
P9	I039	Cme Cleveland W/H, ***Fusion Inc.	copper paste	1962		160 lbs. tare	**79.58**	**0.11**	**0.08**		**1.12**	**0.02**		**0.04**		
P2	I283	Cardinal Stabilizers	tin mud, b/l states ditch sludge, tin solids, non-haz,non-reg	21,700	12 totes		**0**	**1.5**			**0.79**		**0.01**	**0.04**		
P8	I314	Cme Boston W/H, ****Max Metals	solder dross	856	1 dr.		**0.15**	**32.13**	**61.34**							
P5	I666	Butler MacDonald	irony copper, shred boards????	16605		725 lbs. tare	**8.17**	**0.94**	**1.15**	**0.46**	**25.33**	**1.36**	**0.04**	**0.69**	**0.003**	**0.022**
P9	I764	????? - Do not have a lot # like that on inventory														
P10	I816	Toronto W/H	heavy connectors	253	1 dr.		**14**	**0.5**	**2.5**	**0.25**					**0.017**	**0.103**
P9	I898	Cme Detroit ***Visteon	brass grinds salt size	4905	16 drums		**31.3**	**0.14**	**0.19**		**4.01**	**0.07**	**0.01**	**1.93**		
P10	I918	Ford Meter Box	cu fines they call it slag	6,359	6-55 gal. dr.		**26.78**	**2**	**0.77**	**0.12**	**1.41**	**16.16**	**0.03**	**0.19**		**0.003**
P10	I919	Ford Meter Box	cu fines, they called it residues, #2 dust, R Metal and Type B	20309	28-55 gal. dr		**24.39**	**2.77**	**1.07**	**0.06**	**9.41**	**3.91**	**0.02**	**0.2**		
P8	I980	Southwestern Fdy	cu fines they called it fdy sand	18033	19 bbls/2bx	**Never assayed** **Spectroscopy gun**	**1** **38**	**16**	**10**		**0.7**	**17**				
P9	J005/ 006	Cme Charlotte W/H ****Federal Mogul	tin fines 2 lots of tin oxides	7,190		**Never assayed**	**1**	**0**	**50**							
			J005 and J006 showed	21 drums for the 2 lots		**Spectroscopy gun**	**10**	**27**	**35**	**0.05**	**11.4**					

*****4 unknown lots**


Highway 3
Chemetco Lane
PUMP WELL
ZINC OXIDE BUNKER (RCRA)
FORMER (FILLED) COOLING CANALS (RCRA)
FORMER COOLING CANALS (RCRA) — CURRENT STORM WATER* STORAGE
SLAG STORAGE PILE & MATERIAL PROCESSING AREA
FORMER COOLING CANALS (RCRA) CURRENT STORM WATER STORAGE
STORM COLLECTION SYSTEM
SUMP PUMP
ABOVE GROUND SUMP
YARD DRAIN
RAMP
MATERIAL STORAGE (SCRAP METAL)
SCALE
SANITARY WASTE TREATMENT
PUMP HOUSE
SUMP RETURN TO POND
PONDS
CONCRETE
APPROX. LOCATION OF FORMER ZINC OXIDE PITS (RCRA)
APPROX. LOCATION OF FORMER ACID IMPOUNDMENT
ABOVE GROUND DIESEL FUEL STORAGE
OPEN DRAIN CHANNEL (CONCRETE)
MAINTENANCE CHEMICAL STORAGE (TO BE INDOORS)
STORM WATER COLLECTION SYSTEM
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DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1032010-[Exp. #001-015.jpg

Date: 11/03/2010
Time: 12:50 – 2:30
Direction: North
Photo by: Chris Cahnovsky
Exposure #: 001
Comments: Area where pot slag was removed.

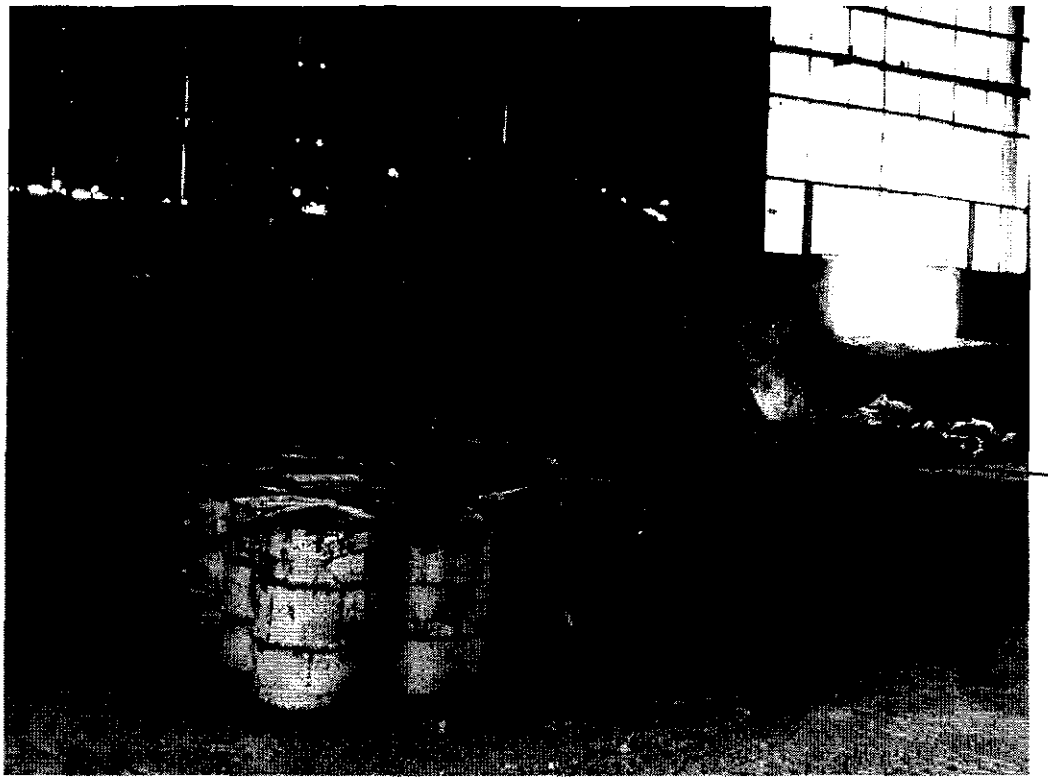
Date: 11/03/2010
Time: 12:50 – 2:30
Direction: West
Photo by: Chris Cahnovsky
Exposure #: 002
Comments: Row P7 mixed with pot slag for sale.

DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1032010-[Exp. #001-015.jpg

Date: 11/03/2010
Time: 12:50 – 2:30
Direction: Northwest
Photo by: Chris Cahnovsky
Exposure #: 003
Comments: Remaining drums of metal bearing material in foundry

Date: 11/03/2010
Time: 12:50 – 2:30
Direction: Northwest
Photo by: Chris Cahnovsky
Exposure #: 004
Comments: Remaining drums of metal bearing material in foundry

DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1032010-[Exp. #001-015.jpg

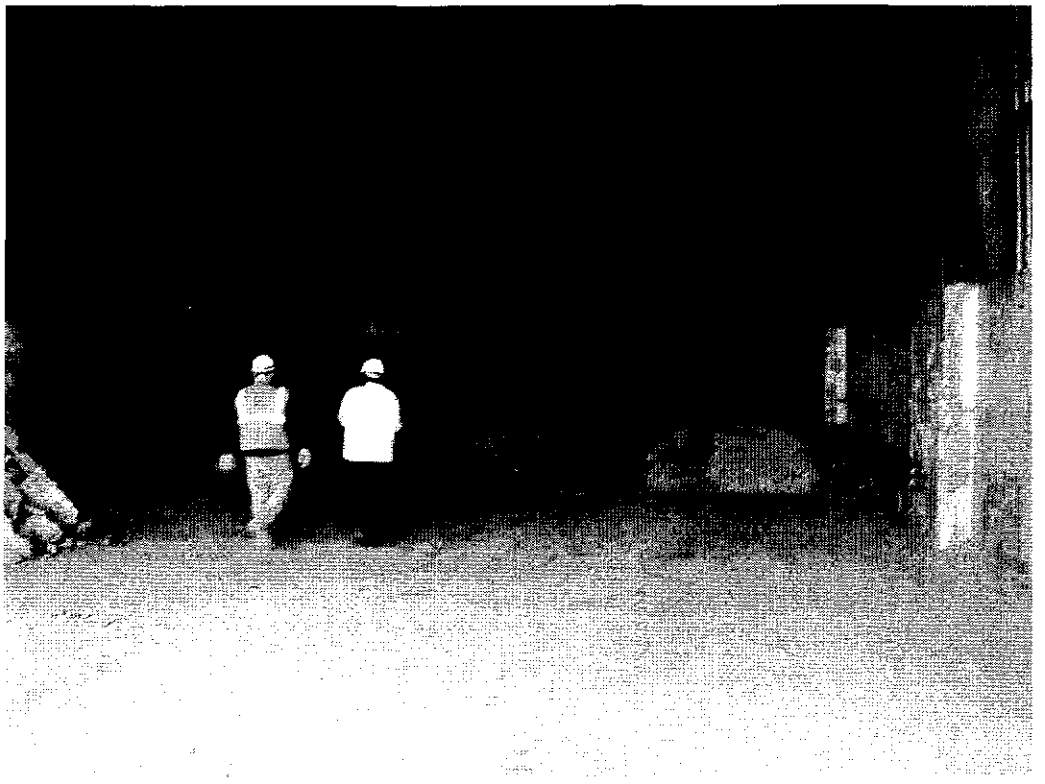


Date: 11/03/2010
Time: 12:50 – 2:30
Direction: West
Photo by: Chris Cahnovsky
Exposure #: 005
Comments: Empty drums that once contained material mixed with pot slag. Also are on foundry floor where drums were dumped and mixed with pot slag

Date: 11/03/2010
Time: 12:50 – 2:30
Direction: West
Photo by: Chris Cahnovsky
Exposure #: 006
Comments: Empty drums that once contained material mixed with pot slag.

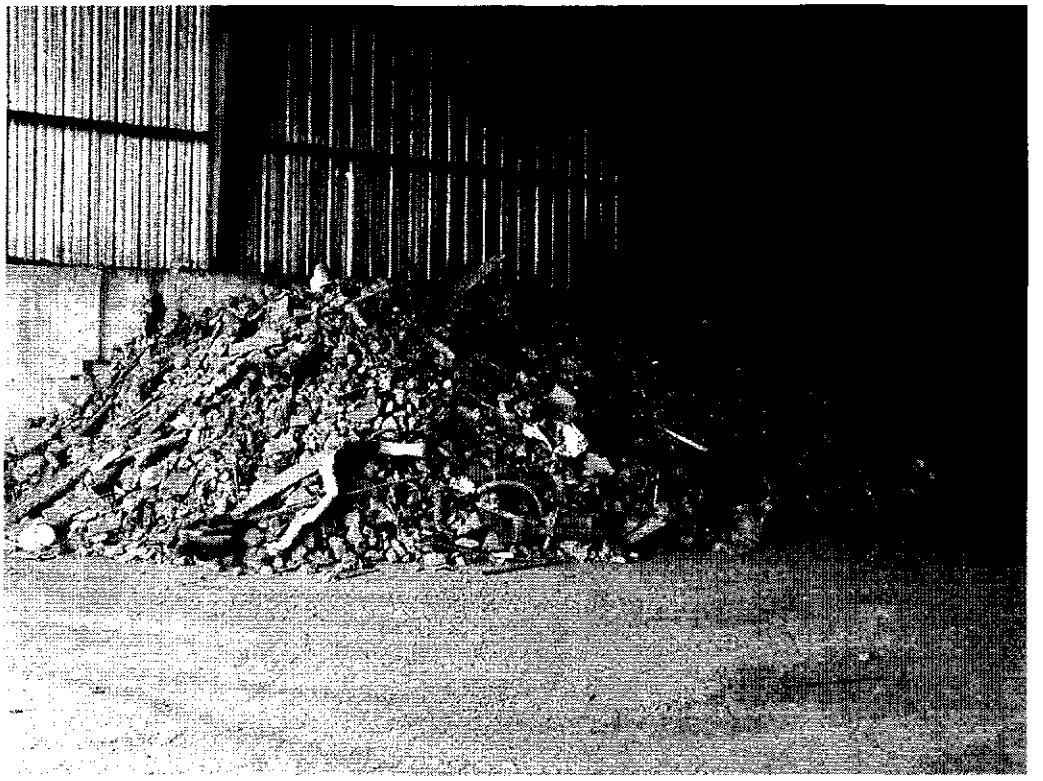
DIGITAL PHOTOGRAPHS File Names: 1198010003~1032010-[Exp. #001-015.jpg

Date: 11/03/2010
Time: 12:50 – 2:30
Direction: Northwest
Photo by: Chris Cahnovsky
Exposure #: 007
Comments: Decon water and PPE generated from pot slag removal.



Date: 11/03/2010
Time: 12:50 – 2:30
Direction: Northwest
Photo by: Chris Cahnovsky
Exposure #: 008
Comments: Fines Building

DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1032010-[Exp. #001-015.jpg

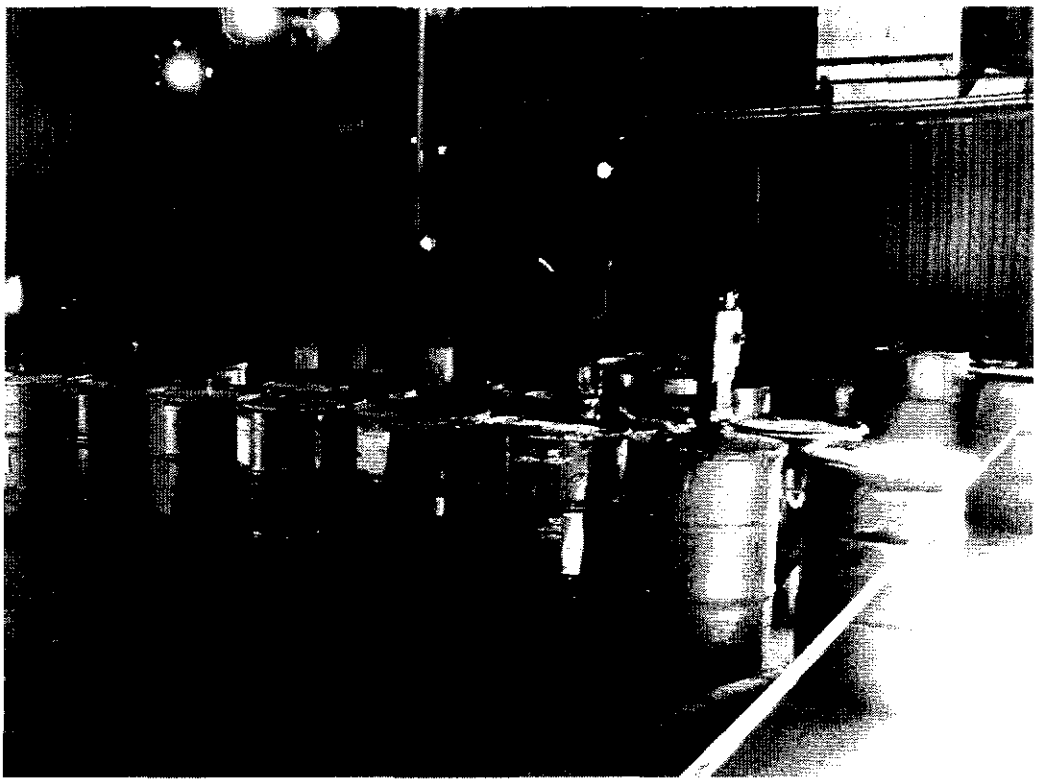


Date: 11/03/2010
Time: 12:50 – 2:30
Direction: Southwest
Photo by: Chris Cahnovsky
Exposure #: 009
Comments: Concrete in Fines Building

Date: 11/03/2010
Time: 12:50 – 2:30
Direction: East
Photo by: Chris Cahnovsky
Exposure #: 010
Comments: Lab packed waste

DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1032010-[Exp. #001-015.jpg

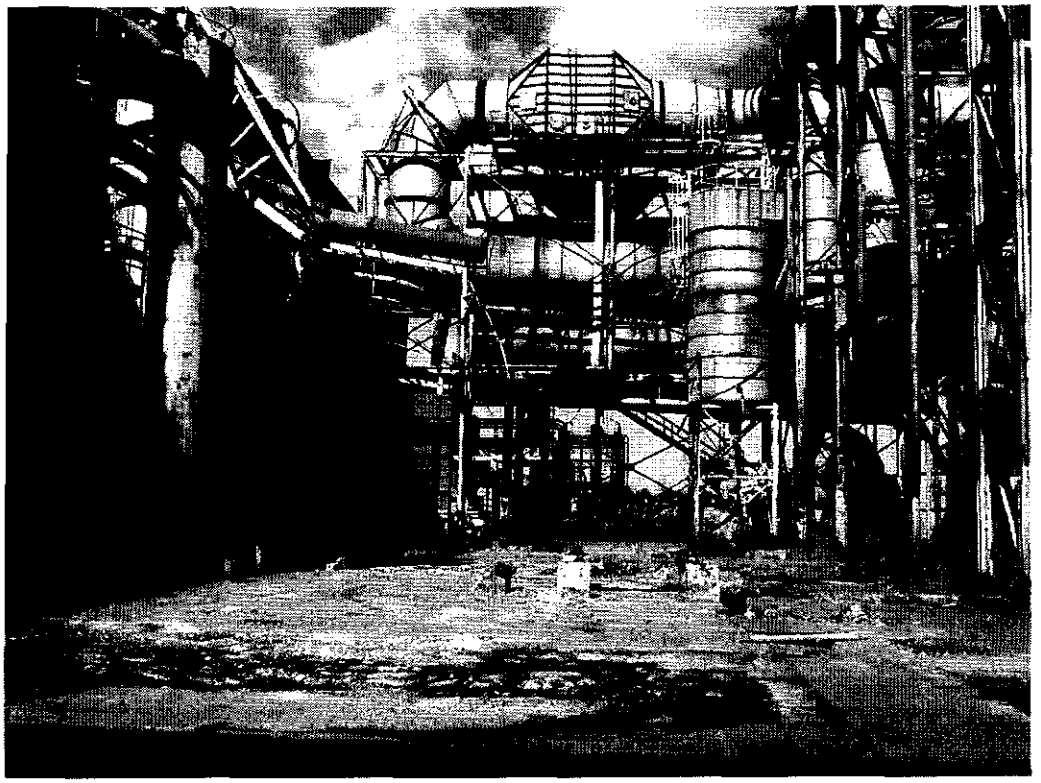
Date: 11/03/2010
Time: 12:50 – 2:30
Direction: Southeast
Photo by: Chris Cahnovsky
Exposure #: 011
Comments: Lab packed waste



Date: 11/03/2010
Time: 12:50 – 2:30
Direction: Southeast
Photo by: Chris Cahnovsky
Exposure #: 012
Comments: Roll of grease drum collected around facility

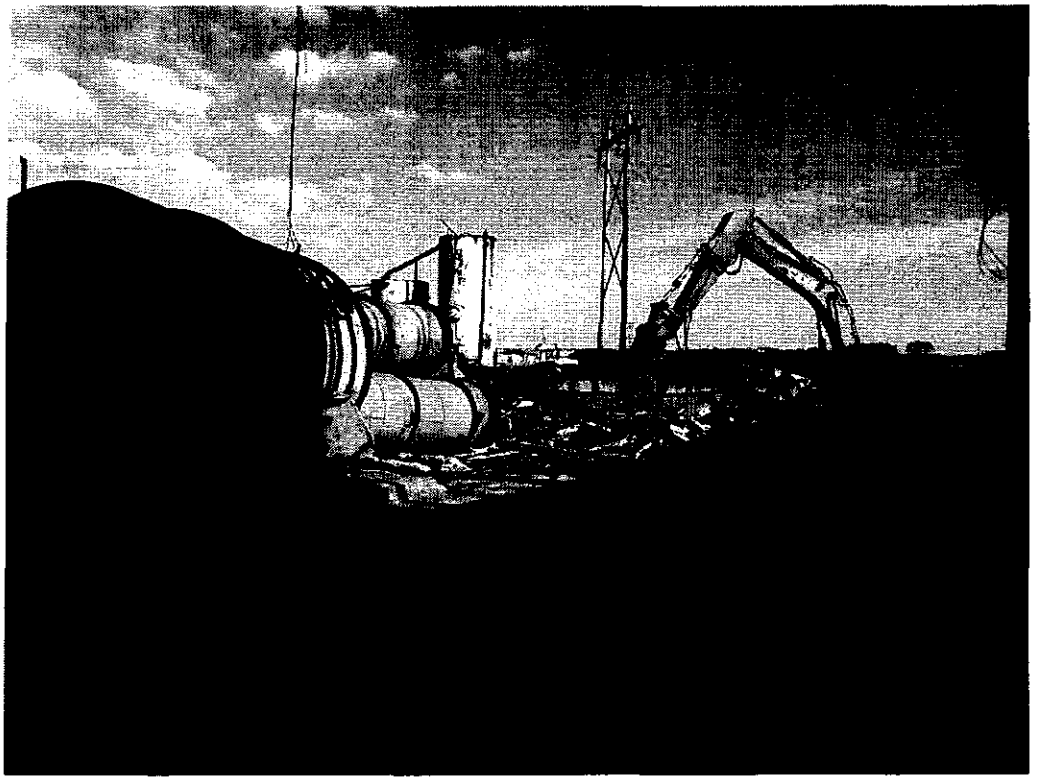
DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1032010-[Exp. #001-015.jpg

Date: 11/03/2010
Time: 12:50 – 2:30
Direction: Northwest
Photo by: Chris Cahnovsky
Exposure #: 013
Comments: Drums of oil collected around facility



Date: 11/03/2010
Time: 12:50 – 2:30
Direction: North
Photo by: Chris Cahnovsky
Exposure #: 014
Comments: AAF area

DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1032010-[Exp. #001-015.jpg



Date: 11/03/2010
Time: 12:50 – 2:30
Direction: East
Photo by: Chris Cahnovsky
Exposure #: 015
Comments: AAF area